

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1 1. (Currently Amended) A method of communicating in a wireless network,
2 comprising:
3 pre-allocating, to a packet-switched real-time, interactive communications
4 application, resources of at least one node of the wireless network, the pre-allocated
5 resources comprising resources normally allocated in response to a call setup request,
6 wherein the pre-allocated resources include resources relating to a link with a
7 predetermined quality of service, wherein the pre-allocating is performed by a system
8 having a processor, and the pre-allocating includes storing a pointer associated with a
9 particular mobile station or a particular group of mobile stations, where the pointer
10 indicates that the pre-allocated resources are useable by the particular mobile station or
11 particular group of mobile stations for call setup;
12 receiving, from the particular mobile station or a member of the particular group
13 of mobile stations, a first call setup request after pre-allocating the resources; and
14 establishing, in response to the first call setup request, a packet-switched
15 real-time, interactive communications session through the wireless network using the
16 pre-allocated resources of the at least one node.
- 1 2. (Original) The method of claim 1, wherein pre-allocating the resources comprises
2 pre-allocating resources of one of a base transceiver system and base station controller.
- 1 3. (Original) The method of claim 1, wherein pre-allocating the resources comprises
2 pre-allocating resources of a packet data serving node.
- 1 4. (Original) The method of claim 1, wherein pre-allocating the resources comprises
2 pre-allocating resources of at least one of a press-to-talk server, voice-over-Internet
3 Protocol server, and a call session control function module.

1 5. (Previously Presented) The method of claim 1, wherein pre-allocating the
2 resources further comprises allocating the link between the at least one node and a second
3 node in the wireless network to carry call control packets for the packet-switched real-
4 time, interactive communications application, wherein the link comprises a dedicated
5 channel.

1 6. (Original) The method of claim 5, wherein allocating the dedicated channel
2 between the at least one node and the second node in the wireless network to carry
3 packets for the packet-switched real-time, interactive communications application
4 comprises allocating one of a T1/E1 trunk, Ethernet link, and IP route.

1 7. (Previously Presented) The method of claim 1, wherein pre-allocating the
2 resources comprises pre-allocating binding information of a mobile station, the binding
3 information to establish a relationship between a radio domain and a packet domain, the
4 method further comprising:
5 storing the binding information in a base station controller; and
6 using the binding information stored in the base station controller for establishing
7 the packet-switched real-time, interactive session in response to the first call setup
8 request.

1 8. (Currently Amended) The method of claim 7, wherein pre-allocating the
2 resources comprises pre-allocating user-related information of ~~[[a]]the particular~~ mobile
3 station, the method further comprising:
4 storing the user-related information in the base station controller, wherein the
5 user-related information indicates the predetermined quality of service assigned to the
6 particular mobile station; and
7 using the user-related information stored in the base station controller for
8 establishing the packet-switched real-time, interactive session in response to the first call
9 setup request.

- 1 9. (Currently Amended) The method of claim 1, wherein pre-allocating the
2 resources comprises pre-allocating binding information of [[a]]the particular group of
3 mobile stations, the method further comprising:
4 storing the binding information in a base station controller, wherein the binding
5 information is to establish a relationship between a radio domain and a packet domain;
6 and
7 using the binding information stored in the base station controller for establishing
8 the packet-switched real-time, interactive session in response to the first call setup
9 request.
- 1 10. (Original) The method of claim 1, further comprising:
2 in response to an event, a management system sending a request to pre-allocate
3 resources to the at least one node,
4 wherein pre-allocating the resources is performed in response to the request to
5 pre-allocate.
- 1 11. (Original) The method of claim 10, wherein sending the request to pre-allocate is
2 performed during a provisioning process.
- 1 12. (Original) The method of claim 1, wherein pre-allocating the resources is
2 performed in response to initiation of a mobile station.

1 13. (Currently Amended) A system comprising:
2 an interface to a communications network; and
3 a controller having a processor and coupled to the interface to:
4 receive a request to pre-allocate call setup resources in the system to a
5 packet-switched real-time, interactive application;
6 in response to the request, pre-allocate the call setup resources ~~in the~~
7 ~~system, wherein the pre-allocated call setup resources enable the establishment of an~~
8 include a pre-allocated Internet Protocol (IP) route having a particular quality of service;
9 receive a call setup request after pre-allocating the call setup resources;
10 and
11 in response to the call setup request, set up a packet-switched real-time,
12 interactive communications session using the pre-allocated call setup resources including
13 the pre-allocated IP route.

1 14. (Currently Amended) The system of claim 13, wherein the pre-allocated call setup
2 resources further include at least one of hardware, software, and communications
3 elements of the system, wherein the pre-allocated call setup resources enable avoidance
4 of allocating the pre-allocated call setup resources during a call setup procedure in
5 response to the call setup request.

1 15. (Currently Amended) The system of claim 13, wherein the pre-allocated call setup
2 resources further include at least one of user-related information, binding information,
3 and mobility information, the system further comprising a storage to store the at least one
4 of user-related information, binding information, and mobility information,
5 the controller to set up the packet-switched real-time, interactive communications
6 session in response to the call setup request using the at least one of the user-related
7 information, binding information, and mobility information.

1 16. (Original) The system of claim 13, wherein the pre-allocated call setup resources
2 further comprise a dedicated channel between the system and another node in a wireless
3 network.

1 17. (Original) The system of claim 13, comprising one of a base transceiver system,
2 base station controller, and packet data serving node of a wireless network.

1 18. (Original) The system of claim 13, wherein the packet-switched real-time,
2 interactive application comprises at least one of a press-to-talk application, voice-over-
3 Internet Protocol application, text chat application, and instant messaging application.

1 19. (Currently Amended) An article comprising at least one storage medium
2 containing instructions that when executed cause a system to:
3 receive a request to pre-allocate resources for a packet-switched real-time,
4 interactive application, the pre-allocated resources normally allocated during a call setup
5 procedure, wherein the pre-allocated resources enable avoidance of allocating the
6 resources during a call setup procedure, wherein the pre-allocated resources include
7 resources related to a link with a predetermined quality of service;
8 in response to the request, pre-allocate the resources and store information
9 pertaining to the pre-allocated resources in a storage, wherein the pre-allocating includes
10 storing a pointer associated with a particular mobile station or a particular group of
11 mobile stations, where the pointer indicates that the pre-allocated resources are useable
12 by the particular mobile station or particular group of mobile stations for call setup; and
13 subsequent to pre-allocating the resources, process a call setup request from the
14 particular mobile station or member of the particular group of mobile stations using the
15 pre-allocated resources.

1 20. (Original) The article of claim 19, wherein the pre-allocated resources include at
2 least one of user-related information, binding information, and mobility information,
3 wherein the system comprises a base station controller having the storage to store the at
4 least one of the user-related information, binding information, and mobility information.

1 21. (Previously Presented) The article of claim 19, wherein the link includes an
2 Internet Protocol (IP) route having the predetermined quality of service.

1 22. (New) The method of claim 1, wherein the pre-allocated resources include a pre-
2 allocated Internet Protocol (IP) route having the predetermined quality of service.

1 23. (New) The article of claim 19, wherein the pre-allocated resources include a pre-
2 allocated Internet Protocol (IP) route having the predetermined quality of service.